

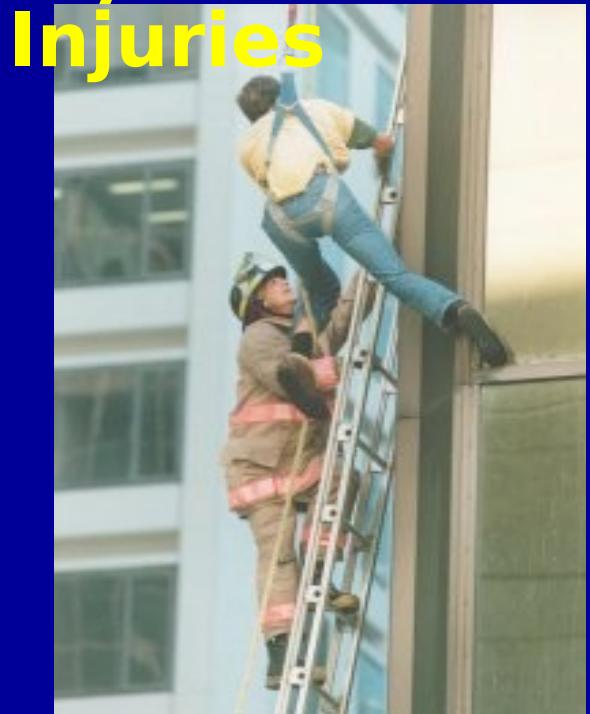
SAFETY & THE ORM PROCESS (Operational Risk Management)

Naval Facilities
Engineering
Command



Cost of Construction Mishaps -

Property and Equipment Damage



“Manage your risks before they manage you.”

Background and Statistics:

- Construction employs 5% of work force
- Construction incurs 20% of fatalities,
- And 12% of the total number of disabling injuries
- About 1000 construction workers die each year



Direct versus Indirect Costs

- Direct Costs:
 - Worker's Compensation
 - Medical
- Indirect Costs:
 - Lost Production
 - Liability Lawsuits
 - Failure to Fill Order



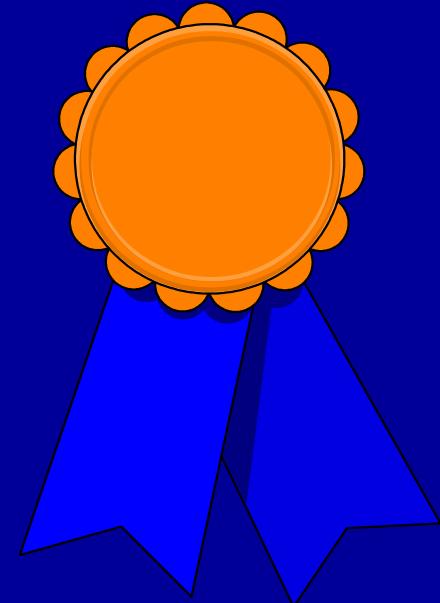
Indirect Costs of Accidents

- Equipment and property damage
- Lost efficiency due to crew breakup
- Lost time by management/supervisors
- Lost time by other workers
- Cost of training new personnel
- Injured worker's lost workdays
- Loss of earning power



It's No Secret!

Success in assuring a safe construction site requires each work phase to be planned well ahead of time.





NAVFAC has been advocating the AHA process for many years. It has been a USACE EM 385-1-1 requirement since 1967; however, until recently, it has not been effectively enforced by the government or accepted by the construction contractor community.

Requirement communicated to contractors by spelling it out in the contract

AHA – Already included in contract documents:

- USACE EM 385-1-1 (01.A.09)
- Specification Section 01525
- FAR Clause 52.236-13

Operational Risk Management / Activity Hazard Analysis ORM / AHA

- A decision making tool
- Increases ability to make informed decisions
- Reduces risks to acceptable levels
- Forces the contractor to plan out the work

How do we do it?

Require it from the contractor before work begins on each phase



Review and accept it

Who Develops the AHA?

The optimum is for the sub contractor to provide it to the prime contractor. The sub is most familiar with the employees, material, and equipment planned to be brought on site. The prime's superintendent is most familiar with the adjacent activities which will be going on at the site and the potential additional hazard exposures.

Operational Risk Management / Activity Hazard Analysis Process

1. Identify Hazards
2. Assess Hazards
3. Make Risk Decisions
4. Implement Controls
5. Supervise



AHA = ORM

AHA requires contractors to:

- Identify each work phase
- Associate hazards with each phase
- Implement controls to eliminate the hazards
- Provide special training or qualifications and equipment required
- Communicate AHA requirements to employees
- Assume accountability and supervise

The Benefits of ORM Through AHA For Contractors

- Reduction in Mishaps
- Improved Mission Effectiveness



Three Crucial Questions ~~Any Employee Should Ask:~~

1. What's going to hurt me?
2. What am I going to do about it?
3. If I can't do anything about it, who do I tell?



ROICC

CONTRACTOR ACTIVITY HAZARD ANALYSIS (AHA)

Page 1

<u>Location:</u>	<u>Contract No.:</u>	<u>Project Title:</u>
<u>Phase (Division):</u>	<u>Prime Contractor:</u>	<u>Subcontractor(s):</u>
General description for scope of work of this Division or other significant activity:		
<u>Date of Preparatory Inspection:</u>	<u>Estimated Start Date of Activity:</u>	
<u>Division/Activity</u>	<u>Potential Safety Hazard:</u>	<u>Procedure to Control Hazard:</u>
<u>Equip To Be Used:</u>	<u>Equip Inspections Required:</u>	<u>Special Training Requirements For Workers:</u>
Reviewed & Approved:		
<u>Prime Contractor Name:</u> _____ Supt: _____ (Signature)	<u>Subcontractor(s):</u> <u>Company Name:</u> _____ CQC: _____ (Signature)	

What is the contractor required to do with the accepted AHA?

- Ensure the workers know what's in it.
- Communicate it during weekly on site safety meetings
- Ensure work complies with requirements
- Supervise



ORM implemented through
~~the AHA process~~

Saves the construction community
and the government



LIVES



\$\$ MONEY \$\$